Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code: U2502

M.E. DEGREE EXAMINATION, NOV 2023

Second Semester

Power Electronics and Drives

21PPE202– EMBEDDED CONTROL OF POWER ELECTRONIC AND DRIVE SYSTEMS

(Regulations 2021)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART - A (5 x 20 = 100 Marks)

1. (a) Discuss about the different memory spaces and their mapping   CO1- U   (20)
         structures

Or

    (b) Explain the various memory addressing modes of TMS320LF2407   CO1- U   (20)
         DSP processor.

2. (a) Explain about the interrupt control registers   CO2- U   (20)

Or

    (b) Summarize about the concepts pin multiplexing and GPIO control   CO2- U   (20)
         register

3. (a) Explain in detail about General Event Manager Information.   CO3- U   (20)

Or

    (b) Draw and Explain the Quadrature Enclosed Pulse (QEP) Circuitry   CO3- App   (20)

4. (a) Explain the various types of FPGA and Xilinx XC3000 series   CO4- U   (20)

Or

    (b) Explain about the PIP and Xilinx 4000 series   CO4- U   (20)

5. (a) Explain Switched Mode Power Converters using FPGA   CO5- U   (20)

Or

    (b) Explain DSP control of Dc Motor drive   CO5- U   (20)

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